



2X PCR Taq Plus MasterMix

Store at -20°C

Cat. No.	Description	Quantity
G901	2X PCR Taq Plus MasterMix (Part No. G014)	25 x 1 ml
G901-dye	2X PCR Taq Plus MasterMix with dye (Part No. G014-dye)	25 x 1 ml

for amplification of A. The 2 PCR Taq Plus MasterMi with dye contains an inert blue dye and a stabilizer which allow direct loading of the final products onto a

To set up a PCR reaction: add A template, primers and water. PCR products, amplified up to b in length with Taq Plus A Polymerase, contain a mixture of blunt ends and single base (A) 3 overhang. The error rate of this PCR amplification is .5 10 cycle. The products can be used for direct T A cloning, but its efficiency is not as high as PCR products amplified with Taq polymerase alone.

1. Add the following components to a sterile 0.2 ml PCR tube sitting on ice.

Components	Volume	Final Concentration
Template DNA	~100 ng	~2 ng/μl
Forward primer (10 μM)	1 - 2.5 μl	200 - 500 nM
Reverse primer (10 μM)	1 - 2.5 μl	200 - 500 nM
2X PCR Taq Plus MasterMix/ with dye	25 μl	1X
Nuclease-free H ₂ O	up to 50 μl	-

- We recommend preparing a mastermix for multiple reactions to minimize reagent loss and enable accurate pipetting.
- 2. Mix contents of tube and centrifuge briefly.
- 3. Incubate tube in a thermal cycler at 94°C for 3 mins to completely denature the template.
- 4. Perform 30 - 35 cycles of PCR amplification as follows:
 - Denature:** 94°C for 30 sec
 - Anneal:** 45 - 72°C for 30 sec
 - Extend:** 72°C for 1 min/1 kb template
- 5. Incubate for an additional 5 mins at 72°C and maintain the reaction at 4°C. The samples can be stored at -20°C until use.
- 6. Analyze the amplification products by agarose gel electrophoresis and visualize by ethidium bromide or SafeView™ (Cat No. G108) staining. If 2X PCR Taq Plus Mastermix with dye is used, load the samples directly without adding additional loading dye. Use appropriate molecular weight standards.

